

ABSTRACT OF THE DISCLOSURE

Provided is a multi-element polycrystal formed by cooling a melt containing multiple components while controlling a cooling rate. The multi-element polycrystal is a mixed crystal essentially formed of elements Si and Ge having different absorption wavelength ranges and having a composition represented by  $Si_{1-x}Ge_x$ , in which Ge absorbs light over a longer range of wavelength from a shorter to longer wavelength range than Si, each of the crystal grains of the mixed crystal has a matrix having a plurality of discrete regions dispersed therein, the average matrix composition is represented by  $Si_{1-x_1}Ge_{x_1}$  and the average composition of the discrete regions is represented by  $Si_{1-x_2}Ge_{x_2}$  where  $x_1 < x < x_2$ . Also, provided is a solar-cell polycrystal satisfying high light-absorption efficiency and low cost by using the multi-element polycrystal, a solar cell and a method of manufacturing the solar cell.